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NOTES ON REPTILES AND BATRACH-IANS OF CENTRAL ILLINOIS

Early in September, 1922, the author made a short trip to Meredosia, Illinois. The collection and observation of reptiles was quite aside from the main object of the trip but many observations were made in connection with other matters and there was an opportunity to spend half a day snake hunting. Some of the results of the trip are of scientific value and Mr. K. P. Schmidt has suggested that they should be published.

Meredosia is situated on the Illinois River about sixty miles above its junction with the Mississippi. Meredosia Bay, probably an abandoned part of the river channel, extends north from the town about seven or eight miles as a broad, shallow body of muddy water. It has an extreme width of something more than a mile and in the present low water conditions has a depth not much more than five or six feet except in one or two pockets where the depth is said to reach about fifteen feet. It seems to be a prolific breeding ground for many water creatures.

About four miles below Meredosia and on the west side of the river, Barlow Lake lies just behind the levee. It is a muddly slough with a summer depth of probably not more than three feet. It is a few hundred feet wide and possibly a mile long. The shores are lined with dead trees which were killed by the raise in water when the levee was built. The shores

and bottom are very soft, sticky clay mud and the water is very warm. Along shore, the mud was so warm that wading was quite uncomfortable.

Barlow Lake is said to contain some fish. It surely has many turtles and water snakes. Turtle heads could be seen in all parts of the lake and we caught many water snakes along the shore.

Meredosia seems to be about the northern limit of many southern species. In the high water of 1922 Alligator Gars came up to within a few miles of the village. The reptile fauna is not well known but there seems to be reason to believe that the Cottonmouth Moccasin may be found there.

Most of the identifications in the following list were made or approved by Mr. Schmidt.

Natrix rhombifera. One large specimen was caught under some boards on the west side of Barlow Lake.

Natrix sipedon. Two small specimens were found in crawfish holes along the river bank and many others of various sizes were caught under trash around Barlow Lake. Some of the smaller ones were very vicious.

Natrix grahamii. One was caught in a small grassy spot at the east side of Barlow Lake. Mr. F. S. Young says that he believes there were some very large snakes of this species in the rock pile at La Grange Locks about twenty-five years ago. He has no proof beyond his boyish recollection, but the memory is that there were very large snakes with a cream colored band along the side in that rock pile. The boy's eyes made them seem as big through as his wrist.

Storeria dekayi. Three small specimens were found under boards on the east side of Barlow Lake. They were back in the bushes where the ground was nearly dry.

Thamnophis sirtalis. One very young specimen was found under a log on the east side of Barlow Lake.

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Thamnophis parietalis. One specimen nearly three feet long and one about half as large were found under boards at the west side of Barlow Lake. They were the most active of the snakes seen about the lake and one which seemed to be this species was the only one seen and not caught. These specimens seem to be surely parietalis, and reduce the brightest ones reported from Chicago' to the appearance of hybrids. The red color on the skin extends to within one row of scales of the dorsal stripe and the entire length of the body.

In the case of *Thamnophis sirtalis* and *parietalis* the author does not follow Ruthven² because he considers the intergradation shown in eastern specimens to be, probably, the result of hybridization.

Thamnophis radix. Several were caught under boards about Barlow Lake.

Lampropeltis calligaster. One small specimen was found in a cement trough at the Meredosia Hatchery. Apparently, some cold water had driven it out of a hiding place after it had been trapped in the trough. It was an exceedingly vicious little creature and resented all attempts at handling.

Agkistrodon piscivorus. There seems to be no record of this species from Meredosia but Mr. F. S. Young believes that certain large spotted snakes with broad heads which he saw in the rock pile at La Grange Locks were of this species. Many of these snakes were killed but he says he never examined one after death. Information in regard to the northern limit of this species is greatly desired.

Chelydra serpentina. Barlow Lake seems to be the home of very many large Snapping Turtles. Their tracks were seen on the mud in many places and a dozen or more were located buried, apparently in

¹ Copeia, No. 112, page 85.

² Variations and Genetic Relationships of the Garter-Snakes. Bull. 61, U. S. Nat. Mus.

preparation for winter. Those that we dug out varied from eight to twelve inches in length of shell. The man who showed us how to find them said that it is a common habit of this turtle to dig in in this manner at any season. He showed us many places where turtles had left their burrows and gone back to the lake. Where the burrows were under logs the turtles were barely covered but out in the open they might be five or six inches below the surface. The turtles were in the very soft mud and had burrowed down to fairly hard bottom. Most of the turtles seemed to have been buried several days but the largest one had apparently gone into retirement that day.

Chrysemys marginata treleasi. Three specimens of a Painted Turtle with red plastron were taken in various places about Meredosia. They are identified as this subspecies because it is supposed to be the Illinois River form.

Graptemys pseudogeographica. Young turtles which seem to belong to this species were taken in most of the streams and ponds about Meredosia.

Amyda mutica and Amyda spinifera. Many young soft shelled turtles were seen in Meredosia Bay. In places where the bottom is mud or soft sand they were buried just at the edge of the water. At a slight alarm the head would be withdrawn but a more serious scare might send them hustling to deep water.

Kinosternon odoratum. One very small Musk Turtle was dug out by the turtle hunter at the edge of the water in Meredosia Bay.

Cnemidophorus sexlineatus. These lizards are very numerous in Meredosia. They scurry off in all directions but seem especially fond of hiding in the cactus patches.

Rana pipiens. There were many small frogs in the grass and bushes around all the bodies of water. In general, their actions were much like those of typical pipiens. They seemed more active and less inclined

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to take refuge in the water than any frogs I had ever seen. It was impossible to drive any of them into the water. Alcoholic specimens do not show any especial differences from ordinary *pipiens* except that the spots are fewer in number and more exactly circular in outline.

In life, these frogs were very dark in color and showed a marked resemblance to Wood Frogs. A heavy black line from eye to snout and another along the upper lip increased this appearance.

It is very difficult to catch these frogs as they dash away with leaps of several feet at the slightest alarm and hide quickly in any safe retreat.

Rana catesbeiana. There were a few large bull-frogs in a cage at the Meredosia Fish Hatchery.

Bufo fowleri. Apparently this toad buries in dry sand during the day. It was a common occurrence to kick them out in the paths.

Acris gryllus. Cricket Frogs are common along the shores of all bodies of water. Some of them were very large. All were dark in color and most of them showed either a red or green streak down the center of the back.

Pseudacris triscriata. One small frog was caught on the bank of the Illinois River opposite Barlow Lake. At first sight it was thought to be a Wood Frog but the black mark on the side of the head extended too far back. In alcohol it shows traces of the usual pattern of this species.

Psaudacris feriarum. The last day of the trip, the turtle hunter took me to the bottom of the hatchery well and we picked up the frogs and toads that were trapped there. One of the specimens is a Pseudacris with short, thick body. It seems to correspond well with Cope's color description of the specimen from the Kiskiminitas River in western Pennsylvania, which he describes as Chorophilus feriarum brachyphonus.

Amphiuma means. Mr. Young has kept this batrachian in an acquarium and he maintains that a creature which he saw in Barlow Lake, looked and acted like a "Congo Eel."

Siren lacertina. A specimen was caught on hook and line at Beardstown, Illinois, late in 1921, and is now in the aquarium in Rothschild's Department Store in Chicago.—Alfred C. Weed, Field Museum of Natural History.

A LIST OF FIJIAN LIZARDS

collected by Dr. W. M. Mann for the Museum of Comparative Zoology in 1915-16, with description of a new *Lepidodactylus*.

Through the kindness of Dr. Thomas Barbour, a collection of lizards from the Fiji Islands, numbering 263 specimens, has passed through my hands for identification. Among the geckos is a single specimen of Lepidodactylus which appears to represent an undescribed form. In listing the names of the islands on which the specimens were obtained, I have followed Dr. Mann's field labels; a number of names are not represented in Brigham's "Index to the Islands of the Pacific Ocean," and certain others evidently represent variant spellings. There follows an annotated list of the species:

- 1. Gymnodactylus pelagicus (Girard) Viti Levu, 4 specimens.
- 2. Gehyra occanica (Lesson) Dravuni (near Kadavu) 1 specimen; Vatoa, 1 specimen; Tubutha, 7 specimens; Fulaga, 2 specimens; Ono Lau, 3 specimens.
- 3. Lepidodactylus lugubris (Dumeril & Bibron) Ono Lau, 3 specimens; Lakeba Lau, 3 specimens; Vatoa, 1 specimen; Nansori, 2 specimens; Fulaga, 6 specimens; Tubutha, 6 specimens; Vunisea, 18 specimens.

4. Lepidodactylus manni, new species. Diagnosis: A round tailed Lepidodactylus nearest to L. gardineri Boulenger, from Rotuma Island, from which it differs in having smooth upper labials, no enlarged internasal scale, shorter head and limbs, and fewer labials and subdigital lamellæ.

Range: Known only from the type locality.

Tupe: M. C. Z. No. 16880, collected at Suene, Viti Levu, Fiji Islands, by W. M. Mann, 1915-16. Description of Type: Head small, snout twice the diameter of the orbit, which is less than the distance from orbit to ear opening; ear opening very small, round: body rather stout, limbs short; tail round, tapering; digits moderate, inner well developed, not webbed; division of the distal lamella merely indicated: 12 lamellæ beneath the third toe. Scales uniformly granular, larger on the snout, largest and flat on the belly; rostral bordered above by three granular scales between the nasals; nostril pierced between the rostral. first labial, and three nasals; three rows of small chinshields graduated into the granules of the throat. Brownish above, with indistinct darker cross bars on body and tail; lower parts lighter. Total length 74 mm. Body 38 mm. Tail 38 mm. Length of head to ear, 9 mm. Width of head 7 mm. (Measurements of body and tail approximate, as I have avoided straightening them.)

- 5. Leiolopisma noctua (Lesson). Munia, 1 specimen; Vatoa, 1 specimen; Nadarivatu, 1 specimen.
- 6. Emoia cyanura (Lesson). Lakeba Lau, 41 specimens; Doi Lau, 22 specimens; Nagrava Lau, 2 specimens; Vunisea, 15 specimens; Vatoa, 8 specimens; Tubutha, 15 specimens; Nacula (Yasawa Group), 1 specimen; Viti Levu, 11 specimens; Fiji Islands, 31 specimens.

7. Emoia samoense (Dumeril). Vunisea, 3 specimens; Dravuni, 16 specimens. A number of specimens from various islands do not agree fully with Emoia samoense, but may be recorded here as the variation among the several specimens is considerable, and much additional material is required to establish their status. Doi Lau, 2 specimens; Lakeba Lau, 1 specimen; Buki Levu, 1 specimen; Tubutha, 2 specimens; Nagasan, 2 specimens; Vatoa, 1 specimen.

9. Cryptoblepharus poecilopleurus (Wiegmann). Yanuia Lau, 5 specimens; Tubutha, 3 specimens; Vunisea, 4 specimens.—K. P. Schmidt, Chicago, Illi-

nois.

LATE DATES FOR MARINE FISHES NEAR NEW YORK CITY

Since the publication of stray notes of this sort in *Copeia*, 88, Nichols, and *Copeia* 91, Townsend and Nichols, the following data have come to the writer's attention.

A small Glut Herring (Pomolobus aestivalis) 13/4 in. long to base of caudal picked up on the shore at Long Beach, Long Island, December 9, 1920 (J. T. N.). A Hammerhead Shark (Sphyrna zygacna), October 14, 1922, and small Moonfish (Vomer setapinnis) as late as November 5, 1922, Asbury Park, N. J. Henry Thurston. The last of the 1922 run of "Tinker" Mackerel (Scomber scombrus), at Dosoris Landing, Long Island, was noted on November 19 by L. B. Hunt. Two or three young Croakers (Micropogon undulatus) about 21/2 to 31/2 inches total length were taken by W. D. W. Miller from the stomach of a red-throated loon picked up dead by G. E. Hix, at Long Beach, about November 26, 1922.—J. T. Nichols, New York, N. Y.

